

**Patient ID\*:** I389

**AGE:** 23/ Female

**COUNTRY:** SouthAfrica

**DIAGNOSIS:** Retinopathy of Pre-Maturity (ROP)

Patient was born prematurely at 26 weeks and weighed only 750 grams. She was in the incubator for 2 months. Later she was diagnosed with blindness in one eye and had 5% sight in the other eye. She had retinal detachment as well as macular degeneration, both of which were corrected through surgery. She also had corrective surgery for 2% atrial septal defect.

**REASON FOR COMING FOR TREATMENT:** The patient had tried all available treatments for ROP and found no improvement in her vision. She was encouraged by her mother to try stem cell therapy to improve her vision and quality of life.

**TREATMENT:** Mesenchymal stem cells derived from Wharton's jelly of which she received 6 injections of stem cells; 3 by the intravenous route, 1 by lumbar puncture and 2 by retrobulbar.

**START DATE OF TREATMENT:** 10th Oct 2012

**BEFORE TREATMENT:** She came to Unistem with no perception of light in the right eye and visual acuity in the left eye was 20/ 200. She was able to read only very large sized letters, but not very clearly. She couldn't read newspapers and her colour vision was defective. She also had horizontal nystagmus. Her pupillary reaction was normal in the left eye and pupillary size was 2 m/ 2.5 mm (left eye).

**AFTER TREATMENT:** After the first intravenous injection, she was able to read large sized letters more clearly. She was also able to read the top line of the snell chart. After the retrobulbar injection, she had a marked improvement in her vision in the left eye and was able to read the second line (20/100). After the injections, she was able to read the third line (20/ 70) of the snell chart and after the sixth injection, she was able to read the fourth line of the snell chart at the time of discharge. Now she can read newspapers with bold letters. Her oscillatory movements nystagmus became better and almost stable. She was able to notice the contrast of white on white. At the time of discharge her vision in the left eye was 20/ 70 (p), N-10, she could also recognise all colours in minute detail.

*Disclaimer: Stem cell therapy using tissue stem cells does not fall under the realm of accepted modalities of treatment. The results reaped from this therapy may differ from person to person.*

*\*To protect identity names of patients not disclosed.*